N.C. Plant and Animal Species Fact Sheets

Smooth Cord Grass

(Spartina alterniflora)



Introduction

This is the common grass you see in N.C. estuaries. It is the dominant plant species in our saltmarshes which are one of the most productive places on earth.

What do they look like?

Spartina is the tall flowing green grass you see in the summer estuary. Every fall it becomes brown and dies. Here it reaches about 4.5 ft. (1.4m.) in height though it is shorter or taller in other places.

Where do they live?

Cordgrass is the dominant plant throughout the intertidal area. Although it does well in fresher water there is more competition from other plants there so you will mostly see this species in the saltier estuary.

Who eats them?

Each year the grass receives solar energy to produce plants which die back in the winter and as they decompose they become detritus. As detritus, this organic biomass is consumed by many small animals in the estuary whether they forage in the sediments, such as worms or they catch bits in the water column, such as pinfish. Periwinkles feed on the live marsh grass as well as the algae that lives on it.

What do they eat?

Like all plants, Spartina grows on solar radiation and minerals in the water and mud. They also need oxygen but unlike land plants that derive their oxygen from air in the soil, there is little oxygen in the sediment of the estuary so these plants have to carry oxygen to their roots.



Special channels in the stem and roots carry air and oxygen to the roots.

How do they reproduce?

Spartina reproduces sexually by seed. They also reproduce asexually through rhizomes.

People Interactions

Spartina is important in the food web of the estuary and it offers a nursery that protects fish, crabs, oysters and other edible species. Unfortunately our actions have transported this plant to other coastal areas where it isn't native and thus an invader. This species is native to the East and Gulf coasts but it is an invader on the West coast. There it occupies the habitat where native plants once lived, interfering with the local ecosystem.

EstuaryLive

www.EstuaryLive.org

North Carolina National Estuarine Research Reserve www.ncnerr.org or tel. 252.728.2170

Albemarle-Pamlico National Estuary Program http://www.apnep.org/ or tel. 252.946.6481

Carolina Estuarine Reserve Foundation

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